STATE OF WASHINGTON

DEPARTMENT OF FISH & WILDLIFE LANDS AND RESTORATION SERVICES PROGRAM

Salmonid Screening, Habitat Enhancement & Restoration Division (SSHEAR)

OFF-CHANNEL SITE INVENTORY DATA

General Information:

Region: North Coast

Observer(s): Nettnin

River System: Sol Duc

Date: 3/11/98

Site Identifier: S-0315

WRIA: 20.0315

River Mile Location: 3.9 mi.

RB/LB: RB

Local Name: Unnamed

Trib. to: Lake Pleasant

Legal Description: SE 1/4 Sec 26 T30N R13W

County: Clallam

Habitat Type: Valley Wall Trib

Landowner: () Federal () State () County () Other Government (X) Private

- Possibly Rayonier Timber Operations Company

Directions to site:

North from Forks on Highway 101 to MP 200.5. Turn left onto West Lake Pleasant Road and drive to the end of the blacktop (~1.3 miles), bearing right at the junction just past the bridge over Lake Creek. Three tenths of a mile up the 9000 line is 20.0315.

Site Overview:

This valley wall tributary drains about 450 - 500 acres of harvested, commercial forest. The channel sources on the southeast flank of Tyee Ridge at 1600 feet. It flows through a V-notch valley to the main valley floor at an elevation of about 400 feet. The reach from the lake to the 9000 line has a gradient of less then 7%. It meanders through a mature forest, has quality gravel, and is most likely the reach where coho spawning would take place. The reach between the 9000 and the 9081 roads fluctuates between 10 - 20%. It has two major tributaries and numerous 1.0 -1.5 meter falls and cascades. The 500-meter reach above the 9081 road has a gradient of 5 - 7%. The next 400 meters, the gradient fluctuates between 12 - 20%, and has a bedrock nick point with a large accumulation of large and small woody debris. This reach also has several small steep tributaries, evidence of mass wasting and frequent large boulders (2 - 3 m diameter). Trout habitat is suspected to continue upstream and that the gradient is less then 25% for a considerable distance. The reach above the 9000 line to the source has a substrate composed of boulders and cobble with gravel in the tailout of the small pools. The RMZ was harvested from past logging and is growing back as a deciduous strip. Due to gradient, the stream has trout habitat above the 9000 line and coho habitat below the road. This system produces low quantities of high quality gravel.

Habitat Information:

Water source: Valley wall tribs and surface runoff

Intermittent/year-around: year-around

Estimated flows (cfs):

Lower end: 4 - 6

Upper end: 2 - 3

On 1/27/99, the flow at the upper culvert was 0.5 - 1.5, and 0.5 - 1.0 cfs at the end of survey.

Water temperatures:

Lower end: 7.0

Upper end: 7.0°C

On 1/23/99 temp. at upper culvert was 5.5°C and 5.0°C on 1/24/99

On 1/27/99 temp. at upper culvert was 4.5°C, and 4.0°C at end of survey.

Adjacent stream temperature (Lake Pleasant): 7.5°C

Other water observations: Clear water

Site area measurements: () Indirect () Direct (X) Combination

Widths: Channel- 2 - 4 m

Pond- NA

Wetlands- NA

Depths: Channel- 8 - 25 cm

Pond- NA

Wetlands- NA

Total length surveyed (includes ponds and wetlands):

- 2100 m of measured mainstem
- 400 m of estimated additional mainstem
- 85m of measured tributaries
- 300m of estimated additional tributaries

Total existing habitat area (est.): 6,400 m²

Spawning area:

1,800 m²

Tributaries: 100 m²

Total: 1,900 m²

Impounded area:

0 m² Other rearing area: 4,000 m² Tributaries: 0 m²

Total: 0 m²

Tributaries: 500 m²

Total: 4,500 m²

Spawning Habitat conditions: () None () Poor (X) Fair () Good () Excellent

Describe spawning habitat:

- Rubble and fines degrade the quality of spawning conditions below the 9000 line.
- Boulders, rubble, and steep gradient impair coho spawning above the road. Resident rout spawning appears to be good in this reach.

Rearing habitat conditions: () None () Poor (X) Fair () Good () Excellent

Describe pond and other rearing habitat:

- The steeper pool/step gradients above the road favors trout.
- Below the 9000 road, the gradient is more favorable to coho. Limiting factors are high flows and little pool habitat.

Describe unaccessible habitat:

- If the culvert at the 9081 road is a barrier, it blocks about 1300 linear meters of trout habitat.

Describe wetland: () Bog () Marsh () Scrub-shrub Wetland () Forested Wetland - None associated with this channel.

Flooding potential: () Low () Medium (X) High

- Flashy flows from within the system.

Fish Information:

Site entry condition to Lake Pleasant: () Poor () Fair (X) Good

- Open and accessible .

Coho access and use:

(X) Unknown () None () Poor () Fair () Good Juvenile-Adult-() Unknown () None (X) Poor () Fair () Good

- Juveniles have access and adult spawning has been observed.
- Spawner survey data is available from the Quileute tribe and WDFW.
- On 1/23/99, three minnow were set above the 9081 road: 0 coho.

Other species access and use: () Chum () Pink () Sockeye () Chinook (X) Trout

- On 1/23/99, three minnow were set above the 9081 road: one cutthroat trout was captured.
- Access is open to all species.

Habitat Improvements:

Enhancement opportunities:

Possible project type:

- Replace upper culvert if it is deemed a barrier.
- Maintain the integrity of the stream.

Equipment access: good

Additional Comments:

Attachments Available:

Contact respective SSHEAR habitat biologist for the following checked items:

() Aerials

(X) Sketch

(X) Maps

(X) Culvert Report

() Other references

(X) Spawning surveys

(X) Juvenile trapping

() Fishway Report

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NORTH COAST OFF CHANNEL SURVEY SUBSEQUENT SITE EVALUATION FORM

River System: Sol Duc

Site No.: S-0315 Site Name: Unnamed

WRIA: 20.0315

DATE: 1/23/99

OBSERVER: Darrow

MINNOW TRAPPING REPORT

TRAP	DATE SET	TEMP	DATE PULLED	TEMP	CATCH COHO TROUT		COTTID		
						RBT	CUTT	0+	
1	1/23	5.5°C	1/24	5.0°C	0	0	0	0	0
2	1/23	5.5°C	1/24	5.0°C	0	0	1	0	0
3	1/23	5.5°C	1/24	5.0°C	0	0	0	0	0
			Т	OTALS:	0	0	1	0	0

COMMENTS:

- -Trap 1 was placed just above the upper culvert at a depth of 40 45 cm. Boulders, cobble and woody debris instream. Salmonberry and 15 year old alder provide shade and bank cover.
- -Trap 2 was placed about 35 m above the upper culvert at a depth of 30 40 cm. Boulders, cobble and woody debris instream. Salmonberry and 15 year old alder provide shade and bank cover.
- -Trap 3 was placed about 70 m above the upper culvert at a depth of 40 45 cm. Boulders, cobble and woody debris instream. Salmonberry and 15 year old alder provide shade and bank cover.
- All traps were baited with salmon roe.
- One NW salamander was captured in the number three trap.

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WDFW FISH PASSAGE REPORTING FORM

LEVEL I - Facility/Barr	ier Identification								
(1) CHECK ONE:	[] Existing Fishway (incl [] Man-made Fish Passa [X] Existing non-barrier	age Problem							
(2) STREAM: Unnamed	• • •	(3) WRIA#/RM: 20.0315 / 0.3							
(4) TRIBUTARY TO: La	ake Pleasant	(5) LE	GAL(S,T,R): SE 1/4 Sec 2	26 T30N R13W					
(6) LATITUDE/LONGIT	'UDE:								
7) MILEPOST/ROAD: 0.33 / 9000 Line									
(8) DESCRIPTION OF FISHWAY, FACILITY: NA									
9) DESCRIPTION OF BARRIER: NA									
10) OWNER: Rayonier Timber Operations Company									
11) FISH ACCESS UP TO BARRIER VERIFIED/PRIMARY SPECIES: Coho / trout									
(12) HABITAT AVAILABLE ABOVE FISHWAY OR BARRIER: NA									
(13) IDENTIFIED BY (agency/organization): WDFW - SSHEAR									
(14) SUBMITTED BY/DATE OBSERVED: Nettnin / 3/11/98									
(15) INVENTORY DESCRIPTOR: S-0315									
=======		======	=======================================						
LEVEL II - Culvert/Bar	rier Description								
CULVERT: Lower culve	ert								
(16) TYPE (Indicate nu	ımber of each):	[]	concrete round						
(17) LENGTH: 40 ft	!: 40 ft		smooth steel pipe CMP - Round						
(18) DIAMETER: 8 feet	t	[X] [] []	CMP - Arch or Ellipse Other:						
(19) WATER DEPTH:		(20) SI	OPE:	(21) VELOCITY:					
(22) OUTFALL DROP:	Counter sunk								
DAM: (23) LENGTH:		(24) H	EIGHT:						

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COMMENTS: culvert is skewed to creek on upper end

WDFW FISH PASSAGE REPORTING FORM

LEVEL I - Facility/Barı	rier Identification							
(1) CHECK ONE:	HECK ONE: [] Existing Fishway (includes baffled culverts) [X] Man-made Fish Passage Problem							
(2) STREAM: Unnamed	d	(3) WRIA#/RM: 20.0315 / 1.0 (5) LEGAL(S,T,R): SE 1/4 Sec 26 T30N R13W						
(4) TRIBUTARY TO: La	ake Pleasant							
(6) LATITUDE/LONGIT	TUDE:							
(7) MILEPOST/ROAD:	0.17 / 9081(logging road	d) -						
(8) DESCRIPTION OF	FISHWAY, FACILITY: N	I A						
(9) DESCRIPTION OF	BARRIER: Excessive sl	ope to cu	ulvert					
(10) OWNER: Rayonie	r Timber Operations Con	npany						
(11) FISH ACCESS UP	TO BARRIER VERIFIE	D/PRIM	ARY SPECIES: Not verif	ied / trout				
(12) HABITAT AVAILA	BLE ABOVE FISHWAY	OR BA	RRIER: Not surveyed					
(13) IDENTIFIED BY (a	gency/organization): V	VDFW -	SSHEAR					
(14) SUBMITTED BY/D	DATE OBSERVED: Netti	nin / 3/11	/98	,				
(15) INVENTORY DES	CRIPTOR: S-0315							
LEVEL II - Culvert/Bar								
CULVERT: Upper culve	ert							
(16) TYPE (Indicate number of each):(17) LENGTH: 80 feet(18) DIAMETER: 5 feet		[]	concrete round concrete box					
		[] [] [X]	smooth steel pipe CMP - Round, steel					
			CMP - Arch or Ellipse Other:	,				
(19) WATER DEPTH:	0.4 ft	(20) SLOPE: 5%		(21) VELOCITY:				
(22) OUTFALL DROP:	None							
DAM: (23) LENGTH:		(24) HI	EIGHT:	,				

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COMMENTS: twenty foot fill over this culvert.



